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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/754,454

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Joseph P. Quinn

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EXAMINER

NGUYEN, TAI T

ART UNIT

PAPER NUMBER

2632

DATE MAILED: 03/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/754,454

**Applicant(s)**

QUINN, JOSEPH P.

**Examiner**

Tai T. Nguyen

**Art Unit**

2632

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 30 January 2004.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 9-17, 19 and 20 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 9-17, 19 and 20 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 9-17 and 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schmitt et al. (US 5,910,782) in view of Racunas, Jr. (US 6,501,391).

**Regarding claim 9**, Schmitt et al. disclose an on-board vehicle parking space finder service system including all subject matters as follows:

at least one object detector (16) disposed proximity to an associated parking space (15) and configured to output an occupied/vacant signal (20) along with an associated space identifier according to whether the vehicle detector detects that a vehicle (10) is presence/absent in/from the associated parking space respectively (figure 1; col. 2, lines 40-52);

a central processor (26) in communication with the at least one vehicle detector (16) via at least one communication link (25, figure 1);

wherein the central processor is programmed to receive at least one of the occupied/vacant signals along with the associated space identifier and maintain an updated database of the occupied/vacant signals along with an associated space identifier (col. 2, lines 52-59);

wherein the central processor (26) integrates the database with geographical map data including a geographical area of the parking space and generates a data structure (col. 4, lines 49-64);

wherein the central processor is further programmed and configured to quickly communicate updated graphic map data structures including updated occupied/vacant signal indication to a network (25, figure 1; col. 3, line 35 through col. 4, line 64).

Schmitt et al. disclose the instant claimed invention except for: the geographical map being displayed on a computer device screen as a graphical map, wherein graphical map having a sufficient detail to distinguish individual parking spaces, wherein the occupied/vacant signal is indicated at a corresponding location on the graphical map. Since Schmitt et al. disclose the central processor in the form of a computer (26) includes a display monitor attached therein (figure 1) and an on-board computer (31) includes a display monitor (32) for displaying maps (figure 5; col. 3, lines 7-10). It would have been obvious to a person having ordinary skill in the art at the time the invention was made to use the computer display monitor at a central site (25) to display the geographical map in order to display the geographical map indicating a parking availability information to an operator. Schmitt disclose the instant claimed invention except for the active street-map capable of being interpreted by standard computer systems for displaying geographical indicators of parking space status at space locations on an electronic street-map. Racunas, Jr. discloses a parking lot status information monitor being connected with a standard computer display device (16) to display the parking data to a user of the parking lot information (figure 1, col. 3, lines 20-

27). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the standard computer system for the display device of Schmitt, as modified, for the purpose of enabling user not having an on-board navigation system to receive parking status information.

**Regarding claim 10**, Schmitt et al. disclose the network is a publicly accessible network (25, as shown in Figure 1).

**Regarding claim 11**, Schmitt et al. disclose the data distribution network in the form of a central site (25) that is used to receive a change data message (20) from the parking meter (15) and transmit a parking space availability message (40) to a parking requested vehicle (30, as shown in Figure 1) but fail to disclose the network includes an Internet. Racunas, Jr. teaches an internet communication of parking lot occupancy using Internet (15) for communicating the parking occupancy to the user. Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to use the Internet as taught by Racunas, Jr. into the system as disclosed by Schmitt et al., as modified, for the purpose of communicating the parking availability to the user.

**Regarding claim 12**, Schmitt et al. disclose at least one vehicle detector (16) is disposed in the marking meter(15, figure 1).

**Regarding claims 13-15**, since Schmitt et al. disclose the at least one communication link is RF transmission (figure 1). It would have been obvious to a person having ordinary skill in the art to use other communication links (electrical transmission line, microwave link, or fiber optic link) to communicate between two

locations for the purpose of providing communication link to transmit and receive data package to one and the other.

**Regarding claim 16**, Schmitt et al. disclose the at least one vehicle detector is an ultrasonic metal detector (figure 1; col. 2, lines 41-46).

**Regarding claim 17**, Schmitt et al. disclose a method of notifying motorist of vacant parking space location comprising the steps of:

detecting the presence or absence of a vehicle (10) in at least one identifiable parking space (15, figure 1; col. 2, lines 41-46);

generating a signal to represent the presence or absence of the vehicle in the at least one identifiable parking space (col. 2, lines 47-52);

associating the signal with a respective space identifier (col. 2, lines 50-52);

interpreting the signal along with the respective space identifier as space identifier data (col. 2, lines 52-63);

integrating the space identifier data with digital street-map data describing an area including the at least one identifiable parking space to form an active street-map; and communicating the active street-map to a network (figure 1; col. 4, lines 49-54).

Schmitt disclose the instant claimed invention except for the active street-map capable of being interpreted by standard computer systems for displaying geographical indicators of parking space status at space locations on an electronic street-map.

Racunas, Jr. discloses a parking lot status information monitor being connected with a standard computer display device (16) to display the parking data to a user of the parking lot information (figure 1, col. 3, lines 20-27). It would have been obvious to one

of ordinary skill in the art at the time the invention was made to use the standard computer system for the display device of Schmitt, as modified, for the purpose of enabling user not having an on-board navigation system to receive parking status information.

**Regarding claim 11**, Schmitt et al. disclose the data distribution network in the form of a central site (25) that is used to receive a change data message (20) from the parking meter (15) and transmit a parking space availability message (40) to a parking requested vehicle (30, as shown in Figure 1) but fail to disclose the network includes an Internet. Manion teaches an integrated parking meter system using both public telephone network and Internet for communicating the parking violator between a parking meter and a host computer/parking attendant (figure 13). Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to use the Internet as taught by Manion into the system as disclosed by Schmitt et al., as modified, for the purpose of communicating the parking availability to the user.

**Regarding claim 19**, Schmitt et al. further disclose the steps of:

communicating the active map to a mobile-accessible network (31, figure 1); and displaying an active map (51, 52) of the parking availability of an area (figure 5).

Schmitt et al. disclose the instant claimed invention except for: determining an user's location using GPS information and displaying the user's position. Since Schmitt et al. disclose the mobile-accessible network (31) including a vehicle navigation system and display monitor (32), wherein the display monitor displaying of a specific area's

parking information based upon the map location currently being viewed (col. 3, lines 4-54). It would have been obvious to a person having ordinary skill in the art at the time the invention was made to use the vehicle navigation system to determine the user's location and display the user's position for the purpose of navigating the user to the relating available parking spaces.

**Regarding claim 20**, Schmitt et al. further disclose the central processor (26) maintains a database with all of the state information for the parking space (15) in a given area in response to a receiving a message transmitted from the parking meter (15) and perform a database look-up for all available parking in a specific area in response to a parking request transmitted from a vehicle (30, col. 2, lines 52-55 and col. 4, lines 49-64). It would have been obvious to a person having ordinary skill in the art at the time the invention was made to use the central processor for periodic updating the active street- map and repeating the step of integrating the space identifier data for the purpose of providing an accurate parking availability to the user.

### ***Response to Arguments***

3. Applicant's arguments with respect to claims 9-17 and 19-20 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP



§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

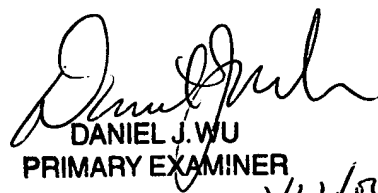
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

1. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tai T. Nguyen whose telephone number is (703) 308-0160. The examiner can normally be reached on Monday-Friday from 7:30am-5:00pm..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel J. Wu, can be reached at (703) 308-6730. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

February 27, 2004  
Tai T. Nguyen  
Examiner  
Art Unit 2632

  
DANIEL J. WU  
PRIMARY EXAMINER  
3/24/04